CHAPTER 8

INTERIM EMERGENCY PROCEDURES AND COMMUNICATION INSTRUCTIONS FOR U.S. MERCHANT SHIPS IN TIMES OF CRISIS, CONFLICT, NATIONAL EMERGENCY OR WAR

PART I U.S. NAVAL COORDINATION AND PROTECTION OF SHIPPING (NCAPS)

800A. General

In periods of crisis, conflict, national emergency or war, naval authorities may direct the movement of merchant ships (including routing and diversion) so that they may be better protected from hostilities and not interfere with possible active Naval and/or Joint Military Operations. The Naval Coordination And Protection of Shipping (NCAPS) organization is the principal U.S. resource to carry out this function. The purpose of NCAPS is to ensure the efficient management and safe passage of merchant ships.

NCAPS may be either employed in a limited geographic area using Regional Naval Control of Shipping (RNCS) procedures, or worldwide using Full Naval Control of Shipping (FNCS) if in the event of global war. In both cases, a significant threat to merchant shipping will deem to exist.

While ship's safety and protection is the primary concern during RNCS, the employment of vessels committed to RNCS remains the responsibility of ship owners and operators. RNCS is voluntary and can either be advisory or active in nature. Ship owners and operators who have voluntarily consigned their vessels to RNCS may withdraw them from RNCS at any time.

Should a crisis situation deteriorate to such an extent and become so widespread as to make RNCS unsuitable, FNCS may be invoked. The implementation of FNCS makes Naval Control of Shipping mandatory on a global basis for all U.S. flag merchant ships and foreign flag merchant ships owned by U.S. companies in the additional interests of national security.

U.S. flag merchant vessels should carry the following Allied Tactical Publications on board for guidance in the event RNCS or FNCS is declared:

- ATP-2, Vol II, Allied Naval Control of Shipping Manual Guide to Masters, corrected through Change 11.
- ATP-2, Vol II, Communications Supplement, corrected through Change 5.

These publications need to be safeguarded and included as turnover items upon relief of ship's Masters. These publications should also be made available to ship's Officers (licensed Mates and Engineers) for review and familiarization.

In the event that a vessel is permanently laid-up, scrapped, or sold to foreign ownership, these publications must be returned to the Maritime Administration (MARAD). If the vessel is sold or transferred to another

U.S. flag shipping or operating company, these publications should be retained on board the ship.

Ship's Masters should inventory their holdings of the publications as listed above. Any publications not held should be requested by contacting:

U.S. DEPARTMENT OF TRANSPORTATION MARITIME ADMINISTRATION DIVISION OF OPERATIONS SUPPORT (MAR-613) 400 SEVENTH STREET SW, ROOM 2123 WASHINGTON DC 20590

800B. Concept of NCAPS and Naval Control of Shipping (NCS)

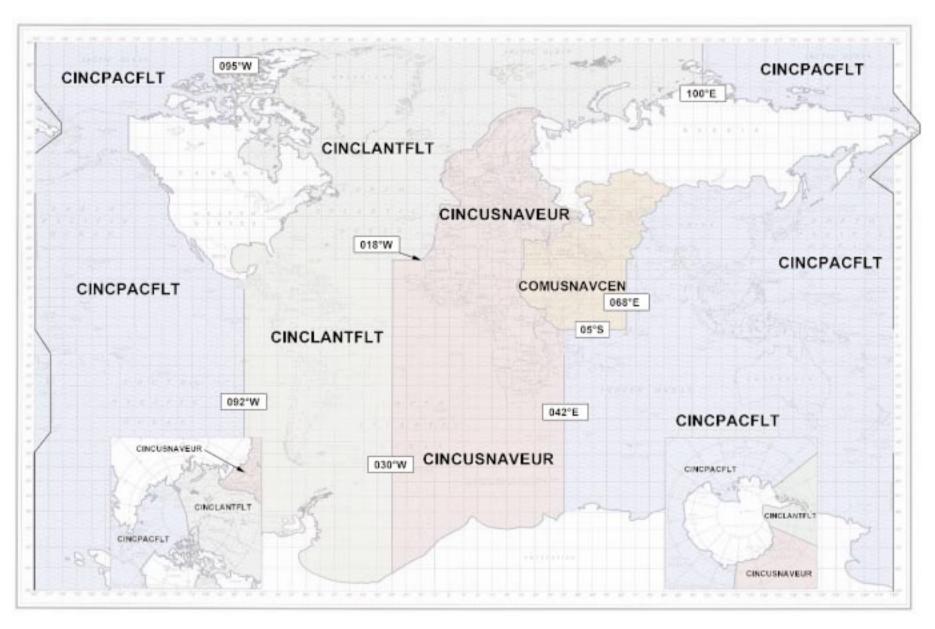
The U.S. Navy divides the oceans into Operational Control Authority (OCA) Areas of Responsibility or AORs. OCAs are identified below and their geographic AORs are depicted in the chart that follows:

OCA Long Title	OCA Short Title
Commander-in-Chief, U.S. Atlantic Fleet	CINCLANTFLT
Commander-in-Chief, U.S. Pacific Fleet	CINCPACFLT
Commander-in-Chief, U.S. Naval Forces Central Command	COMUSNAVCENT
Commander-in-Chief, U.S. Naval Forces Europe	CINCUSNAVEUR

At the onset of hostilities or whenever a U.S. flag merchant vessel is in a threatening situation, the ship's Master should contact the relevant Naval Commander as indicated in Chapter 4, Part II, of this publication.

The OCA is responsible within their AOR for the management of all vessels including the possible routing and diversion of ships, the organization and movement of convoys, and the coordination of merchant ship movements with the operations of protective Naval Forces.

At its discretion, the OCA may delegate these responsibilities to a subordinate commander. The OCA may declare an area as a Naval Control of Shipping (NCS) Region which is a political and military reaction to counter threats to economic or contingency support merchant shipping. Shipping Risk Areas (SRAs) may be established



U.S. OCA AREAS

within the NCS Regions to delineate areas of highest merchant shipping risk.

800C. Regional Naval Control of Shipping (RNCS)

When conditions within a small geographic area threaten the peaceful passage of U.S. merchant ships, the OCA may designate that ocean, coastal or littoral area as a NCS Region. Sailing instructions will be carried out voluntarily by U.S. merchant vessels seeking either to transit or enter a port within the NCS Region. The OCA may delegate the functions of merchant ship management to a designated Shipping Control Coordinator (SCC) who may typically be the Commander of Naval Forces within the region.

The SCC is supported by NCAPS Naval Reserve members as part of U.S. Naval Control of Shipping policy. NCAPS personnel comprise Shipping Control Teams (SCTs) and Naval Liaison Officers (NLOs) who may be located at key U.S. and foreign ports served by U.S. shipping within a defined NCS Region.

When RNCS procedures are established, U.S. merchant vessels will be notified of the establishment of the NCS Region and its geographic boundaries via a MARAD ADVISORY, HYDROLANT/HYDROPAC Broadcast Warning or similar official message. Shipping Control Points (SCPs) and Communications Reporting Gates (CRGs) will be established at which merchant ships are requested to call via Inmarsat an RNCS Point of Contact to receive further instructions for safe passage into or through the NCS Region. The CRG will usually be a point 48 to 72 hours sailing distance from entering the NCS Region and will operate on designated communications frequencies as agreed to during the initial Inmarsat call.

Masters are advised to contact the RNCS Point of Contact when approaching SCP or CRG and to identify their ship by name, international radio call sign, flag and destination. Adherence to this policy will enable merchant ships to be pre-cleared and avoid delays that may be associated with unnecessary Maritime Interdiction Operations conducted by Naval Forces.

Once contact has been made with the Shipping Control Coordinator or his representative, routing, communication procedures, rendezvous positions, and other pertinent initial information will be passed.

Shipping Control Team personnel located shoreside at NCAPS Offices will further advise merchant ship's Masters on the risks to shipping, monitor merchant ship traffic (this may include routing and diversion) and maintain a merchant ship database and plot for the assigned Shipping Risk Areas (SRAs) within the NCS Region.

It is possible that convoy or accompaniment procedures will need to be utilized for ships transiting or entering port within the NCS Region. Under these circumstances, ship's Masters may expect Naval Liaison Officers (NLOs) to be available as ship riders. NLOs are trained to embark and operate on board merchant ships. While acting as the Shipping Control Coordinator's representative, they advise Masters on ship movements throughout transit of an SRA

and provide the communications bridge between the merchant ship and naval authorities.

It is possible that NLOs will be used even when convoys or accompaniment procedures are not employed to provide routing information and communications procedures to ship's Masters. This is the most secure method of providing this information and embarkation will likely be at sea with debarkation either at an SCP at sea or in port. For merchant ships transiting the NCS Region, a recommended route will be provided at first contact and Masters will be requested to inform the Shipping Control Coordinator of their departure from the NCS Region. The departure notification is most important for without it, a necessary Search and Rescue operation may be initiated.

Where NCAPS Offices are not established, Reporting Officers (REPTOFs), Naval Control of Shipping Liaison Officers (NCSLOs) or Consular Shipping Advisors (CONSAs) perform NCAPS port level functions as described above.

It is intended that NCAPS personnel will be deployed in a period of rising tension so that a Naval Control of Shipping Organization (NCSORG) will be operational if the outbreak of hostilities or war occurs.

800D. Full Naval Control of Shipping (FNCS)

From the declaration of FNCS, U.S. flag merchant ships and U.S. controlled foreign flag ships will sail under naval control and direction. Naval authorities will determine whether a ship will sail in convoy or independently and will prescribe the route, communications procedures, recognition signals and other aspects of ship movement. The NCSORG will not be concerned with matters of ship employment, e.g. determination of cargoes, loading of cargoes, or business operations, except to the extent necessary to ensure that ships are properly outfitted and capable of completing planned voyages.

NCAPS Office - SCT personnel will provide sailing orders and routing instructions for each voyage to the Master of each ship. The orders and instructions will be issued in accordance with instructions of the OCA or from its delegated Naval, Joint Military Forces or Multi-National Authority. When a convoy is planned, SCT personnel will conduct a convoy conference, at which merchant ship's Masters, principal GMDSS Operators, and other concerned persons will be briefed on convoy organization, scheduling, routing, communications plans, and other matters that might affect the convoy movement.

The OCA will maintain a continuing and predictive plot of all merchant ship positions based on reports transmitted at CRGs and by NCAPS personnel at SCPs.

More detailed information on Naval Control of Shipping concepts and procedures can be found in ATP-2, Vol. II, Guide to Masters and ATP-2, Vol. II, Communications Supplement.

Naval, Joint Military Forces or Multi-National Authorities may give orders to merchant ships sailing under FNCS procedures concerning the following types of matters:

- Date and time of departure.
- Route to be followed.
- Speed.
- Emission Control (EMCON) policy.
- Anti-terrorism precautions.
- Visual, radio and satellite communications procedures.
- Force protection and defensive tactics.
- Communication Reporting Gates (CRGs).
- Shipping Control Points (SCPs).
- NLO embarkation/debarkations.
- Tactical and secure communications.
- Search and rescue operations.
- Accompaniment.
- Evasion and diversion tactics.

800E. Allied Naval Control of Shipping

In the event of a war or an emergency in which the United States is a member of an International Alliance, Naval Control of Shipping (RNCS or FNCS) may be established by the OCA of the International Alliance. The procedures set out in the preceding paragraphs concerning RNCS and FNCS will apply within the International Alliance NCS framework. The NCSORG of each nation will serve the merchant ships of all nations of the International Alliance.

Allied merchant ships that are at sea when a war or an emergency is declared will be controlled initially by their own National Authorities. They will be subject to Allied Naval Control from the time they first establish contact with any of the Allied NCSORG authorities.

A merchant ship cannot be taken under Allied Naval Control until its own government has consigned the ship under RNCS or FNCS conditions. However, the appropriate civil authority of that port will govern the conduct of all U.S. controlled merchant ships in an Allied port. After the establishment of National and Allied Naval Control, no merchant ship may sail without permission from either the local Allied Authority or its own Consular Officer, or if none exists, a designated Allied Consular Officer.

800F. Interface Between NCSORG and Civil Shipping Authorities Under FNCS

Civil Shipping Authorities (referred to collectively as the Civil Direction of Shipping Organization or CDSORG) direct the employment of merchant ships, except those merchant ships under operational control of Naval, Joint, or International Alliance military authorities. The U.S. National Shipping Authority (NSA US), which is the wartime operational arm of the Maritime Administration (MARAD), is the U.S. civil shipping authority.

The NSA US, in wartime and national emergencies, will direct the use of U.S. shipping as necessary to meet requirements for military and essential economic support when FNCS is declared. The NSA US will manage U.S. merchant shipping through existing ship operating companies which will become General Agents of the U.S. government. Ships will receive operating orders through their operating companies, as in routine commercial practice.

Within the United States, communications pertaining to the business of the ship will be transmitted between operating companies and ships, utilizing normal commercial communications channels and procedures if conditions permit.

Merchant ship operators will transmit business traffic for ships to their agents at destination ports. Ship's Masters will transmit business traffic to their operating companies through the agents of their companies. In special situations, NCAPS Offices may accept business traffic for transmission through military communications channels to NSAs for retransmission to operating companies.

Ships will not transmit departure, arrival, or underway position reports (including AMVER reports) in times of war or emergency when FNCS has been implemented. Communications, which include ship movement and position information, will be transmitted only via the NCSORG. Movement reports will be provided to the NSA US by NCAPS personnel and will be relayed by secure means to ship operators.

800G. Questions and Comments

Ship's Officers, ship owners, and operators are encouraged to submit questions and comments on procedures outlined in this chapter to:

U.S. DEPARTMENT OF TRANSPORTATION MARITIME ADMINISTRATION OFFICE OF NATIONAL SECURITY PLANS (MAR-620) 400 SEVENTH STREET SW, ROOM P1-1301 WASHINGTON DC 20590

PART II NAVAL CONTROL OF SHIPPING PROCEDURES

810A. General

Naval Control of Shipping is mandatory in times of war or emergency when the outbreak of hostilities would appear imminent and FNCS has been declared.

The ramping up or transition from RNCS to FNCS may easily be facilitated with the advanced establishment of NCS Regions by the OCA, the identification of merchant shipping threats in SRAs, and the advanced deployment of NCAPS personnel to strategic ports. With allowable time, merchant ship positions may be obtained and a predictive merchant plot created. Ship's Masters would be briefed by SCT personnel on the NCSORG in place with CRGs and SCPs being established. Embarked NLOs would provide the ship's Master with direct routing advice and serve as a communications link with operational Naval or Joint Military Forces.

War or an emergency, however, might breakout without a preceding period of limited Naval Control of Shipping as with RNCS. The instructions (810C, 810D and 810E) that follow are designed to enable U.S. merchant ships to operate initially under FNCS until they can be briefed on the NCSORG system.

- U.S. merchant ships in friendly or neutral ports will comply with instructions contained in sec. 810C.
- U.S. merchant ships in enemy ports or enemy-controlled waters will comply with instructions contained in sec. 810D.
- U.S. merchant ships at sea will comply with instructions contained in sec. 810E.

Masters, at their own discretion, may enter safe haven ports, report their positions to the OCAs, NSA US, and their owners, and wait for instructions.

810B. SPECIAL WARNING TO MARINERS and MARAD ADVISORY Messages

The establishment of FNCS will be declared by an appropriate authority to all U.S. flag ships and U.S. owned foreign registered ships. A Department of State SPECIAL WARNING TO MARINERS and/or MARAD ADVISORY message will then be transmitted in plain language to the owners and operators of U.S. flag ships and to owners and operators of U.S. owned foreign registered ships.

The SPECIAL WARNING TO MARINERS or MARAD ADVISORY message will announce the existence of the situation that makes it necessary to establish FNCS. Supplemental messages (addressed either generally or to particular ships) will be broadcast via the Allied Merchant Ship Communications System known as MERCOMMS.

Advisory and supplemental messages will be transmitted by Inmarsat to ships equipped with Inmarsat terminals and by HF radioteletype to ships equipped with narrow band direct printing (NBDP) terminals, using digital selective calling (DSC) automatic acknowledgment where applicable.

HF transmissions will be used for ships that do not have Inmarsat capability until those ships are equipped with one of the modern systems.

810C. Instructions for Ships in Friendly or Neutral Ports

At the establishment of FNCS, ships in U.S. ports will be boarded and given initial instructions by the NCAPS or other U.S. Navy or Coast Guard authority.

Ships in friendly foreign ports, including many neutral ports, should expect to be boarded and instructed by either of the following representatives:

- NCAPS personnel.
- Allied NCS personnel.
- NCSLO.
- REPTOF.
- CONSA.
- Naval Attaché.
- Military Sealift Command Office (MSCO).

In neutral ports, where none of the above officials are stationed, Masters will report to the local Naval Authority, if any. Otherwise, they should contact the relevant Naval Commander as listed in Chapter 4, Part II - Appendix A, of this publication.

When unable to make contact with any of the above authorities, Masters should attempt to contact their owners or the appropriate OCAs for instructions. This request should also be copied to NSA US and the ship's operating company.

810D. Instructions for Ships in Enemy Ports or Enemy Waters

In the course of a developing crisis, National Authorities will make their best efforts to keep ship operating companies informed of developments and to advise that ships be withdrawn from trade with a potential enemy, or that sailing to ports of a potential enemy be delayed until the situation clarifies. Notification may be given by a SPECIAL WARNING TO MARINERS and/or a MARAD ADVISORY message or by other means appropriate to the situation. Ships should attempt to make their way to the nearest available port or anchorage of an Allied or friendly nation and await further instructions from NSA US or their operating company. Every precaution will be taken to avoid having U.S. merchant ships in enemy ports or enemy-controlled waters at the outbreak of hostilities.

In a rapidly developing crisis, it may not be possible to clear all ships from enemy-controlled waters before the outbreak of hostilities. If merchant ships are caught in enemy ports, they should attempt to make contact with U.S. Consular Officials (if operating) and should attempt to clear for international waters before they are boarded. If

those efforts are blocked by enemy force, Masters may be obliged to submit to boarding and possible seizure. If communications means are available, Masters should attempt to submit a Ships Hostile Action Report (SHAR) as noted in sec. 400E of this publication.

810E. Instructions for Ships at Sea

Merchant ships at sea will continue voyages unless in danger areas defined in either the SPECIAL WARNING TO MARINERS and/or a MARAD ADVISORY message or supplemental messages. Upon receipt of the advisory message, Masters will immediately file an updated AMVER message report, and contact Naval Authorities as directed in the advisory. Ships requiring diversion or changes in destination can be identified and given instructions by the NSA US. In situations involving widespread threats to Allied merchant shipping, instructions would be given to avoid major ports and, if necessary, proceed to an identified safe haven for additional instructions.

Normally, electronic emission silence (EMCON) must be maintained within defined danger zones, except when the use of electronic navigation equipment is necessary for safe navigation.

Masters should transmit an updated AMVER message (see example below) by Inmarsat telex or similar rapid communications system. Generally, voyages will be continued unless, in the judgement of the Master, contrary action is justified to preserve the ship from immediate danger of capture or attack. Following receipt of AMVER messages, voyage destination changes will be given to those ships requiring changes in track or destination based on the tactical situation.

The updated AMVER message should include the following information in lines designated "X":

- General machinery condition of ship.
- Number, composition and nationality of crew.
- General cargo and any excess capacity.
- Maximum available sustained speed.
- Percent of fuel capacity on board and endurance.

The "Y" line must contain the keyword "MAREP" in order that the NSA US has access to the information.

Sample AMVER Message:

AMVER/PR// A/CAPE DIAMOND/WMHJ// B/120500Z// C/3630N/02330E// E/145// F/126// I/NEW YORK US/4040N/07330W/180800Z// M/1501501//

X/GOOD CONDITION NEED 5T STORES CRANE

REPAIRED// X/10 LICENSED, 17 UNLICENSED ALL US

NATIONALS// X/MAX SPD 17 KTS//

X/FUEL 60 PERCENT 18 DAYS STEAMING//

Y/MAREP//

Z/EOR//

For additional details and specific instructions regarding the Automated Mutual-Assistance Vessel Rescue (AMVER) System and message preparation, refer to Chapter 7 of this publication.

PART III COMMUNICATION FACILITIES AND PROCEDURES

820A. General

During routine day-to-day commercial operations, communications with merchant ships are conducted through commercial satellite (Inmarsat) and through Coast Radio Stations (CRS) by MF (with DSC) and HF (with DSC) means. Because this system is well practiced and efficient, it will also be used by Allied governments and Military Commands to support RNCS or FNCS and will form the basis for Allied Merchant Ship Communications (MERCOMMS). Each OCA is allocated either an Inmarsat Coast Earth Station (CES) or a Coast Radio Station (CRS) with long-range communications capability that will enable communications with merchant ships when and if required by the military situation. A list of these stations is given in Appendix A – MERCOMMS Area Organization.

The role of HF radio in support of ship-to-shore services is a secondary, but an important adjunct to the primary Inmarsat services. The Department of Defense (DoD) HF shore interface availability has been severely curtailed. The U.S. Coast Guard (USCG), however, still maintains an HF capability. The USCG has the ability to relay message traffic from merchant vessels and government stations from and into Naval message handling systems. The following USCG HF Ship-Shore Entry Points are provided:

USCG Communications Station	Call Sign
USCG CAMSLANT Chesapeake, VA	NMN
USCG COMMSTA New Orleans, LA	NMG
USCG CAMSPAC Point Reyes, CA	NMC
USCG COMMSTA Kodiak, AK	NOJ
USCG COMMSTA Honolulu, HI	NMO

820B. MERCOMMS Implementation

When RNCS or FNCS is declared, merchant ships will continue to communicate using routine commercial practice and procedures. OCAs wishing to send messages to merchant ships for which they do not know the message routing will do so by relaying the message to a specific routing authority in the country of the ship's flag or to the ship's owner or operator as required (See Appendix B – Signal Messages' Addresses and Routing Indicators of Focal Points).

When MERCOMMS is implemented, each OCA will use his allocated CES/CRS. Ships will be directed by NCAPS personnel or Allied NCS authorities to maintain communications watch with the appropriate coast station. However, to maintain flexibility for shipping using ocean routes, the coast station does not necessarily have to be the coast station assigned to the area(s) through which the ship is passing. For ship to shore communications traffic, merchant ships are free to use any Allied coast station, but

for traffic to their OCA, they should preferably use the OCA's allocated CES/CRS. Ships fitted with satellite communications equipment will exchange message traffic through direct dial access with shore authorities as described in sec. 820K.

820C. Standard Naval Messages and Procedures

Since commercial message formats (i.e. email plain text or HTML) are incompatible with the Defense Messaging System (DMS), the standard Naval message format will be used on messages addressed directly to or originated by U.S. Navy or other government agencies. The message format is logically arranged and concise having a standard order or sequence in which the content of the message is placed for transmission over communication circuits. General Administrative (GENADMIN) is the format used for most narrative messages unless other instructions or directives require a different format.

Each standard Naval message part has certain components that are broken down into elements and contents. This provides an easy method of handling those messages containing information addresses, eliminates the need for a signature and reduces the number of words necessary to effect the delivery of the message. Standard Naval messages consists of two basic parts being the Message Heading and Text.

The Message Heading provides communications handling instructions. An example is as follows:

P 011235Z APR 00 FM CAPE DIAMOND TO CINCLANTFLT OPCONCEN NORFOLK VA INFO CNO WASHINGTON DC//N3N// COMSC WASHINGTON DC//NOOR1// MARITIME ADMIN WASHINGTON DC//MAR 610/ 613/620//

- Precedence - Message precedence is the desired timeliness for delivery of the message to the intended reader. This is the first letter of every standard Naval message and precedes the Date Time Group of the message. The precedence is extremely important in the processing of communications as it distinguishes between messages requiring immediate attention and those that can be reasonably reviewed after other important issues have been resolved. There are four precedence's for Naval messages that should be considered before transmitting any communication from a ship. They are as follows:

Symbol	Title	Time of Delivery Objective
R	Routine	6 hours.
P	Priority	3 hours.
О	Immediate	30 minutes.

Symbol	Title	Time of Delivery Objective
Z	Flash	10 minutes or less.

 Date Time Group (DTG) - The DTG is assigned for identification and filing purposes. The standard format of the DTG is DDHHNNZ MON YR.

Symbol	Title	Remarks
DD	Date	Two numbers represent the Date (UTC).
НН	Hour	Time of Day (UTC) based on a 24 hour clock.
MM	Minutes	Time of Day (UTC) based on a 24 hour clock.
Z	Time Zone	All DTGs are expressed in UTC (Z).
MON	Month	Three letter abbreviation for Month.
YR	Year	Last two digits of the year.

- Originator The Originator is the plain language address (PLAD) of the ship or station transmitting the communication. This is in the "FM" line of the message.
- Action Addresses The Action Address is whom the communication is being sent to as designated in the "TO" line of the message. Plain language addresses of action address(es) should include specific office codes if known.
- Information Addresses Information Address(es) are to get copies of the communication but are not required to take any action. These are designated in the "INFO" line of the message.

The Message Text follows the Heading and is enclosed by the two letters "BT." The "BT" at the beginning and end of the message indicate the beginning and end of the communication. The following is an example of the Message Text:

BT
UNCLAS//N00000//
MSGID/GENADMIN/CAPE DIAMOND//
1. THIS EXAMPLE SHOWS THE CLASSIFICATION
LINES AND MESSAGE IDENTIFICATION CODE FOR
A SINGLE PARAGRAPH NAVAL MESSAGE.
BT

 Classification - The first line of this part of the Naval message indicates the classification of the communication. There are four basic classifications as follows:

Symbol	Remarks
UNCLAS	Unclassified - release of information is authorized.

Symbol	Remarks
CONFIDENTIAL	Compromise of this material could affect the security of the U.S.
SECRET	Compromise of this material could cause danger to the security of the U.S.
TOP SECRET	Compromise of this material could cause grave danger to the security of the U.S.

The classification of the message must be consistent with the sensitivity of the information being transmitted and made in consideration of the need to transmit a message. Messages other than UNCLAS will only be transmitted over encrypted communications nets.

- Standard Subject Identification Code (SSIC) The SSIC is a Navy means of categorizing and tracking communications. The SSIC immediately follows the classification code of the message. When responding to a unique message, use the SSIC from the message that illicit a response. If unknown, use N00000.
- Message Identification Code (MSGID) The MSGID is a brief description of the information that will follow in the Naval message and will identify the ship transmitting the communication.

820D. General Messages to Merchant Ships

General messages are drafted at national, OCA, or higher command levels and contain information concerning operating and safety procedures that require wide distribution. They are of two types:

- Those originated by an Allied Naval Authority and addressed to all Allied merchant ships under that Authority's operational control.
- Those originated by a National Naval Authority and addressed to all merchant ships of that nation in one or more ocean areas.

Prior to the declaration of RNCS or FNCS, general messages of an urgent nature are transmitted by normal commercial practice and procedures. When MERCOMMS has been activated, general messages of an urgent nature are transmitted by master and alternate stations at the completion of scheduled traffic list periods. Less urgent messages which do not require transmission to ships by radio are disseminated to NCAPS or Allied NCS authorities that will retain them for pickup by Masters on arrival in port. Full details are contained in Appendix C – General Message Organization.

While the Masters of individual ships receive general messages as action addressees, it is their responsibility to determine what action, if any, needs to be taken.

General messages originated by an Allied Naval or National Authority which will be required to remain in force for some time will be numbered as described in Appendix C. Allied Naval or National Authorities originating general messages will periodically promulgate

lists of general messages still effective for the areas under their control.

Example of a numbered general message:

BT
UNCLAS//
MSGID//ALMERNOR/00081//
1. RECENT SIGHTING OF SMALL HIGH SPEED
WATERCRAFT BEARING 270 AT 12NM FROM SCP
BRAVO. MASTERS ARE CAUTIONED AS TO THE
POTENTIAL OF TERRORIST HARASSMENT AND
OR MINING THREATS TO SHIPPING IN THIS AREA.
2. NAVAL AUTHORITIES ARE AWARE AND HAVE
TAKEN APPROPRIATE MEASURES.
3. MASTERS ARE REMINDED TO REPORT TO SCT
WHEN ABEAM TO CRG'S WITHIN SRA ALPHA.
PLEASE GUARD 2187.5 KHZ AND CHANNEL 70 FOR
SITUATION UPDATES.

Separate files of the various categories of general messages, appropriate to the area of operations or nation concerned, are to be maintained.

General messages shall be retained until canceled or superseded.

820E. Watchkeeping on Ships

Ships that have a certified Global Maritime Distress and Safety System (GMDSS) radio equipment installation on the bridge, in accordance with IMO regulations effective from 1 February 1999, may elect not to carry a dedicated Radio Officer. Instead these ships will have two or more persons with GMDSS Radio Operator's licenses; in most cases being regular Watchkeeping Deck Officers and/or the ship's Master.

820F. Transmission of Traffic

Details of schedules, frequencies, and modes of emission of coast stations may be obtained from up-to-date national and international publications (Coast Station lists).

General messages will be broadcast by master and alternate stations.

OCAs are responsible for notifying message routing authorities of ship guard arrangements in order for such messages to be routed via automated or other national communications means.

820G. Coastal Shipping Communications

Within each OCA's area, MF and VHF coast radio stations will also be used to transmit traffic and warnings to merchant shipping within range. VHF coast stations will operate in a similar manner after making a preliminary general call on channel 16.

Detailed information about coastal radio services and watchkeeping schedules is given in national and international publications.

820H. Transmission Security

All electronic emissions (including those from Inmarsat terminals) are subject to interception and direction finding. Radio transmissions in the VHF and UHF bands can normally be intercepted only at a short distance beyond the visible horizon. Depending upon the height of the receiver, however, this may be a substantial distance from the ship. Satellite transmissions in the VHF and UHF bands can be intercepted by those activities within the footprint of the satellite. Radio transmissions in the MF and HF bands can normally be intercepted at great distances. The ability of a shore-based Direction Finding (DF) network to intercept emissions from merchant ships is limited by the communications range of the radio band in use and height of the receiver. Although interception of terrestrial VHF and UHF transmissions at sea is substantially less for MF and HF transmissions, the risk of such interception should not be disregarded. Radio Silence and Electronic Emission Control (EMCON) are employed to reduce the opportunities for intelligence gathering and direction finding.

820I. Radio Silence

Radio silence means an effective measure to enhance the safety of ships by concealing their location and identity. Unrestricted radio and Inmarsat transmissions by ships at sea quickly reveal their presence and may invite reprisal from enemy or belligerent forces.

Merchant ships may be directed by the controlling Naval Authority to maintain radio silence. When so ordered, shore to ship traffic will be transmitted by the broadcast method. Attention is drawn to ATP-2, Vol. II, Communications Supplement.

820J. Electronic Emission Control (EMCON)

EMCON restricts or eliminates emissions from electronic devices to deny enemy or belligerent forces intelligence gathering and direction finding opportunities. It controls the overall electronic environment to allow ships in company to effectively use emitters and sensors without mutual interference.

NCAPS personnel or Allied NCS authorities will normally provide an EMCON Plan as part of the Sailing Order Folder for each ship sailing under RNCS or FNCS environments. This plan will state the conditions under which shipboard electronic emitters (Radars, Doppler logs, echo sounders, hand-held VHF radio, GPS polling beacons, etc.) may be used. For ships in company, more than one EMCON Plan may be used to allow for contingencies.

820K. Satellite Communications (Inmarsat)

The Master and GMDSS Equipment Operator must be aware that the flexibility of an Inmarsat terminal allows any subscriber, civilian or military, with a telephone,

computer terminal or telex and knowledge of the proper dialing sequence to directly access an Inmarsat equipped ship. Every effort should be made to restrict unauthorized calls when operating within a RNCS or FNCS environment. NCAPS personnel or Allied NCS authorities are to ensure the promulgation of telephone numbers for relevant shore authorities to the ship and for the ship to relevant shore authorities. National regulations may require, for accounting purposes, the satellite communications are to be routed through a central agency as designated in ATP-2, Vol. II, Guide to Masters and ATP-2, Vol. II, Communications Supplement.

To prevent involuntary activation of the automatic acknowledgment feature of Inmarsat terminals, possibly providing position information to hostile forces, power supply to the transmit side of Inmarsat shipboard terminals will be shut off during emission control (EMCON) conditions as noted above.

820L. Fishing Vessel Communications

It is the responsibility of nations to establish their own requirements for communications with and by their own fishing fleets.

PART IV NUCLEAR FALLOUT WARNING SYSTEM FOR MERCHANT SHIPS AT SEA

830A. Significance of NBC Warnings

Radioactive fallout from nuclear explosions on sea and land targets (particularly the latter) may affect large areas of adjacent waters. The areas affected will depend upon the prevailing wind conditions; any ship close to or approaching these areas will be in grave danger. It is therefore essential that shipping should be warned of fallout hazards in order that:

- Passive defense measures, such as activating washdown systems, may be taken.
- Course may be altered, if necessary, to avoid dangerous zones.

830B. The MERWARN System, Warnings to Merchant Ships at Sea

A simplified fallout warning system has been established throughout NATO for broadcasting, via MERCOMMS and coastal radio stations, warnings of radioactive fallout dangerous to merchant shipping. This system calls for the origination, by NATO naval authorities, of three types of messages:

- MERWARN Effective Downwind Message (MERWARN EDM).
- MERWARN NBC 3 NUC.
- MERWARN DIVERTORD.

In some cases it may be better to provide warning of fallout by means of general plain language messages rather than by these formats.

830C. MERWARN Originating and Diversion Authorities

The NATO commanders that are designated as MERWARN originating and diversion authorities are listed in the table below.

COMNORLANT (MHQ Pitreavie) will serve as alternative diversion authority to CINCEASTLANT for areas IV through VIII.

The French Naval Command transmits its warning and diversion messages via French maritime radio stations to French merchant ships under national control in the following areas:

- CECLANT Areas I, II, IV, and VIII.
- CECMED Area III.
- PREMAR I French coastal waters within the ACCHAN area.

830D. Precedence of NBC Messages

All MERWARN NBC messages should be given FLASH precedence to ensure rapid handling on any military circuit between the originating authority and the MERCOMMS and/or coastal radio stations. This precedence should not be used where the rules for the use of the international safety signal (TTT for radiotelegraphy and SECURITAY for radiotelephony) apply.

830E. Method of Promulgation

All MERWARN EDM and NBC 3 NUC messages will be transmitted in plain language, using GMT, preceded by the international safety signal, from the appropriate MERCOMMS station and all coastal radio stations in the area concerned. Masters need not concern themselves with the identity of the MERWARN originator, but only with the sea area covered by each message.

830F. Relay Responsibilities

Originating authorities are responsible for relaying to:

- The appropriate MERCOMMS area and/or coast radio stations in their geographic area.
- Their own national authorities (for transmission to merchant ships not yet copying MERCOMMS).
- Adjacent MERWARN originators and shipping diverting authorities within the geographical area affected by each MERWARN NBC 3 NUC message.

Area	Originating Authority	Diversion Authority
I. OCEANLANT	COMOCEANLANT	COMOCEANLANT
II. CANLANT	COMCANLANT	COMCANLANT
III. MEDITERRANEAN	COMNAVSOUTH	COMNAVSOUTH
IV. COMTASKFORNON (southern boundary to 65°08'07"N and 9°41'08"E, thence to Kap Brewster (Scoresbysund, Greenland))	COMTASKFORNON	CINCEASTLANT (NOC Northwood)
V. Baltic area, Kattegat, and Skagerrak	COMBALTAP	CINCEASTLANT (NOC Northwood)
VI. To south of area V, extending to cover NORLANT, ADNEW and North Sea areas down to and including the Dover Strait	COMNORLANT	CINCEASTLANT (NOC Northwood)
VII. CENTLANT, PLYMCHAN	COMCENTLANT	CINCEASTLANT (NOC Northwood)
VIII. IBERLANT	CINCIBERLANT	CINCEASTLANT (NOC Northwood)

830G. Danger Zones

All shipping in waters out to 200 miles from the coast at the outset of a nuclear war must be regarded as being in an area of possible fallout danger from nuclear explosions on shore. Ships sailing in the following areas must be particularly regarded as being in serious danger from nuclear fallout:

- North Sea south of 57°N.
- English Channel east of 5°W.
- Baltic Sea.
- Mediterranean north of 40°N and west of 20°E including the Adriatic Sea.
- Aegean Sea.
- East coast of North America, south of 50°N to the Gulf of Mexico.

830H. MERWARN EDM

MERWARN EDM is a prediction, for a specified sea area and time interval, of the fallout which will result from a 1 megaton (MT) nuclear surface explosion. It will give the Master, observing a nuclear explosion, an immediate indication of the area likely to be affected by fallout.

EDM will be issued at 12 hour intervals from the time of activation of the MERCOMMS system, and will be valid 12 hours ahead from the date and time given in the first line of the message (line A). In the event of changing meteorological conditions it may be necessary for the originating authorities to issue MERWARN EDM more frequently. An earlier MERWARN EDM will automatically be overruled by an updated MERWARN EDM.

The following standard format will be used:

- A. Message identifier (MERWARN EDM) and 12-hour-valid date-time (GMT).
- B. Specified sea area for which valid.
- C. Effective downwind direction (in degrees, three digits) and effective downwind speed (in knots, three digits).
- D. Downwind distance of Zone 1 (in miles, three digits).
- E. Additional information.

Example:

- A. MERWARN EDM 180600Z
- B. BALTIC SEA WEST OF 15-00E
- C. 045-020
- D. 078
- E. NIL

Note: Items B, C, and D may be repeated for different sea areas, covering the whole MERCOMMS area, if necessary.

830I. MERWARN NBC 3 NUC, Standard Format

MERWARN NBC 3 NUC will be issued after a nuclear explosion which produces fallout, giving fallout data for a specific explosion or series of explosions, which will be identified in the message.

MERWARN NBC 3 NUC messages are issued as soon as possible after an explosion, and at 6 hour intervals (to the nearest hour) thereafter, for as long as fallout danger exists. They contain information which enables the Master to plot the danger area.

The standard format of the MERWARN NBC 3 NUC is:

- a. Message identifier (MERWARN NBC 3 NUC).
- A. Strike serial number (originator's numbering).
- D. Date-time of detonation (GMT).
- F. Location of explosion (latitude and longitude or known geographical place name.)
- Effective downwind direction (in degrees, three digits).
- Z. Effective downwind speed (in knots, three digits), downwind distance of Zone 1 (in miles, three digits), and cloud radius (in miles, two digits).

Example:

- a. MERWARN NBC 3 NUC
- A. 04
- D. 201405Z
- F. PLYMOUTH
- Y. 292
- Z. 010-014-03

830J. MERWARN NBC 3 NUC, Plain Language Format

The MERWARN NBC 3 NUC standard format may not be suitable after a multiple-strike nuclear explosion which produces fallout from several bursts in a large or complex target area.

In such cases warnings will be plain language statements of a more general nature, indicating area affected and expected movement of the fallout.

Example 1:

- a. MERWARN NBC 3 NUC
- A. 14
- D. 020300Z

FALLOUT EXTENDS FROM NORFOLK TO HATTERAS AT 020300Z AND SPREADING SOUTHEASTWARD AT 17 KTS. SEA AREA OUT TO 100 NM FROM COAST LIKELY TO BE AFFECTED BY 020900Z.

Example 2:

- a. MERWARN NBC 3 NUC
- A. 14
- D. 020900Z

FALLOUT AT 020900Z ESTIMATED TO BE OCCURRING OVER MOST OF SEA AREA 50-80 NM EAST OF COASTLINE FROM NORFOLK TO HATTERAS. FALLOUT MOVING SOUTHEASTWARDS AT 12 KTS, BUT GETTING WEAKER. FALLOUT NOT EXPECTED TO BE DANGEROUS AFTER 021500Z.

830K. DIVERTORD Messages

In addition to the origination of MERWARN EDM and MERWARN NBC 3 NUC messages, naval authorities may, if circumstances dictate, broadcast general diversion orders, based upon fallout threat, whereby merchant ships proceeding independently will be passed evasive routing instructions of a more general nature, under the standard NCS identifier DIVERTORD.

Example:

A. DIVERTORD

B. ENGLISH CHANNEL CLOSED. ALL SHIPPING IN NORTH SEA REMAIN NORTH OF 52-00N UNTIL 031500Z.

830L. Other Warnings

ATP-2, Vol II, Communications Supplement, par. 0609 gives instructions for the display of signals by ships which have received a MERWARN NBC 3 NUC message which affects their area. Ships arriving from sea but remaining beyond visual/aural range of shore stations should continue to keep radio watch in order to receive MERWARN messages.

830M. Ground Zero

The point on the surface of sea or land immediately below, at, or above a nuclear explosion is called ground zero (GZ).

830N. Effective Downwind Direction and Downwind Speed

Winds in the atmosphere vary considerably with height, both in direction and speed, and have a major influence on the distribution of radioactive fallout from a nuclear cloud.

The worst contamination will fall to the surface along a path represented by the average wind between the surface and the middle of the nuclear cloud.

Based upon meteorological information on the wind conditions in the airspace between the surface and the height of the nuclear cloud, NBC collection centers will compute the average direction and speed of the radioactive particles' path from the nuclear cloud to the surface.

The results of this computation make up the fallout prediction, expressed in the terms of effective downwind direction and speed.

It should be particularly noted that the effective downwind direction is the direction towards which the wind blows. This direction is also known as the fallout axis.

The surface wind will usually be considerably different from the effective downwind, both in direction and speed, and the surface wind should never be used to estimate the drift of fallout.

830O. Fallout Pattern Criteria

The predicted fallout area consists of two zones, Zone 1 and Zone 2, with the following characteristics:

- Zone 1 is the zone of immediate concern. Within this zone there will be areas where exposed, unprotected personnel may receive doses of 150 cGy (rads) or greater, in relatively short periods of time. Casualties among personnel may occur within this zone.
- Zone 2 is the zone of secondary hazard. Within this zone the total dose received by exposed, unprotected personnel is not expected to reach 150 rads within a period of 4 hours after the actual arrival of fallout, even when the radioactive fallout remains on the deck of the ship.

Outside these two zones the risk will be negligible.

830P. Fallout Plotting in Merchant Ships

When a nuclear explosion is reported in a MERWARN NBC 3 NUC message, the Master should immediately plot the fallout area on a chart, using the information contained in the message. A plot example accompanies the next section.

When a MERWARN NBC 3 NUC is not available (for example, when a nuclear detonation is observed from the ship) the data contained in the current MERWARN EDM should be used. The plotting procedures are almost identical in the two cases.

For purposes of simplification, merchant ships should use cloud radius and safety distance as follows:

- Plotting from MERWARN EDM: Use a cloud radius of 10 miles and a safety distance of 15 miles in all cases.
- Plotting from MERWARN NBC 3 NUC: Use the cloud radius given in the MERWARN NBC 3 NUC and, in all cases, a safety distance of 15 miles.
 - Plotting should be performed in the following manner:
- Plot the location of the detonation (ground zero) on the chart. Draw a downwind axis from GZ in the downwind direction given in line Y of the MERWARN NBC 3 NUC. Draw two additional downwind radial lines from GZ, 20° to either side of the downwind axis.
- Using GZ as center and the downwind distance of Zone 1 (line Z of the MERWARN NBC 3 NUC, 4th-6th digits) as radius, draw an arc between the two radial lines on each side of the downwind axis. Draw a second arc between the radial lines to represent Zone 2, doubling the downwind distance for radius.
- Using GZ as center, draw a semicircle upwind (opposite the downwind axis and radials) using the cloud radius (line Z, last two digits).
- From the intersections of the Zone 1 arc with the two radial lines, draw straight lines to the ends of the cloud radius semicircle.
- To determine the area in which fallout deposition is predicted to occur at any given time after the detonation:
- Multiply the effective downwind speed (from MERWARN NBC 3 NUC, line Z, first three digits) by the time after the burst (in hours), the result being a distance in miles.
- To and from this distance add and subtract a safety distance of 15 miles to allow for finite cloud size, diffusion, and wind fluctuations. The result will be two distances.

- With GZ as center and the two safety distances obtained above as radii, draw arcs across the plotted fallout area.
- The area enclosed between the two arcs will contain, in most cases, the area of deposition of fallout for the desired time after the burst.

830Q. Plotting from MERWARN NBC 3 NUC

Example:

Given:

- a. MERWARN NBC 3 NUC
- A. CC 03
- D. 091715Z
- F. PLYMOUTH
- Y. 295
- Z. 018-040-05

Problem: Determine the predicted fallout area and the area within which fallout is predicted to deposit at the surface at 091845Z.

Solution (See figure.):

 On the chart plot GZ and draw a downwind axis from GZ on a bearing of 295° for a distance of 80 miles. Draw two

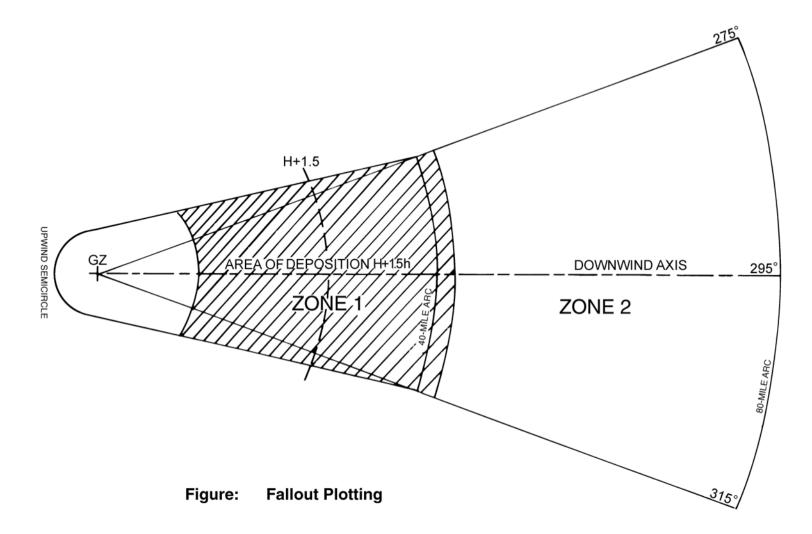
- radial lines from GZ, bearing 275° and 315°, both 80 miles long. (80 is twice the downwind distance in line Z).
- Using GZ as center, draw arcs between the radial lines at 40 miles downwind to mark Zone 1, and at 80 miles downwind to mark Zone 2.
- From line Z, the cloud radius is 5 miles. With GZ as center and 5 miles as radius, draw the cloud radius semicircle upwind of GZ.
- From the intersections of the Zone 1 arc with the radial lines, draw straight lines to the ends of the cloud radius semicircle.
- 091845Z is 1.5 hours after the burst. From line Z, first three digits, obtain the effective downwind speed; 18 knots:

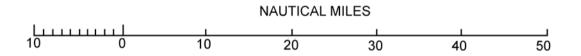
18 kts x 1.5 hr = 27 miles

The safety distance is always 15 miles.

27 + 15 = 42 miles, and 27 - 15 = 12 miles.

- With GZ as center and 42 miles and 12 miles as radii, draw arcs across the fallout pattern. The area enclosed by the two arcs and the boundary of the pattern is the area within which fallout is predicted to deposit at the surface at 091845Z.





APPENDIX A

MERCOMMS AREA ORGANIZATION

Ships are to use the normal calling and working procedures applicable. Coast station schedules and frequencies may be found in national and international publications (Coast Station lists). Coast Earth Stations (CESs) and Coast Radio Stations (CRSs) are allocated to OCAs in the following table:

CES	A CCC CT ATTED OCA			
CES	ASSOCIATED OCA	OTHER USERS		
Atlantic Ocean Region (West) (AOR-W)				
GOONHILLY	COMCENTLANT	COMNORLANT		
		COMWESTNORTHWEST		
		COMNORTHNORTHWES		
SOUTHBURY	COMOCEANLANT	COMCANLANT		
PLEUMEUR BODOU	CECLANT	CINCIBERLANT		
	Atlantic Ocean Region (East) (AO	R-E)		
BLAAVAND	ADMIRALDANFLEET	ADMIRALDANFLEET		
		COMBALTAP		
EIK	COMNAVSONOR	COMNAVNON		
SOUTHBURY	COMOCEANLANT	COMCANLANT		
PLEUMEUR BODOU	CECLANT	CINCIBERLANT		
FUCINO	COMEDCENT	COMGIBMED		
		COMEDEAST		
ATA	COMEDNOREAST			
BURUM	COMBENENORTHWEST			
RAISTING	COMGERFLEET			
THERMOPYLAE	COMEDEAST			
	Indian Ocean Region (IOR)	•		
EIK	COMNAVSONOR	OCAs as required		
THERMOPYLAE	COMEDEAST			
ATA	COMEDNOREAST	7		
BURUM	COMBENENORTHWEST	7		
PERTH		\exists		
	Pacific Ocean Region (POR)	•		
SANTA PAULA	CINCPACFLT	OCAs as required		
PERTH		7		

Allocation of Long Range Coast Radio Stations			
COUNTRY	LONG RANGE HF STATION	CONTROLLING OCA	OTHER USERS
Australia	Perth	MDC AUSTRALIA	
	Sydney		
Belgium	Oostende	COMBENENORTHWEST	
Canada	Halifax (VCS)	COMCANLANT	
	Vancouver (VAI)	MARPAC	
Denmark	Lyngby	ADMIRALDANFLEET	COMBALTAP
France	St Lys	CECLANT	CECMED
Germany	Norddeich	COMGERFLEET	

Allocation of Long Range Coast Radio Stations			
COUNTRY	LONG RANGE HF STATION	CONTROLLING OCA	OTHER USERS
Greece	Athens	COMEDEAST	
Italy	Roma	COMEDCENT	COMNAVSOUTH
			COMGIBMED*
			COMEDSOUEAST+
Netherlands	Scheveningen	COMBENENORTHWEST	
New Zealand	Awarua	NAVCOM NZ	
Norway	Rogaland	COMNAVSONOR	COMNAVNON
Portugal	Lisboa	CINCIBERLANT	COMGIBMED**
Spain	Aranjuez	Not yet known	
	Pozuelo del Rey		
Turkey	Istanbul	COMEDNOREAST	
UK	Portishead	COMCENTLANT	COMNORLANT
			COMWESTNORTHWEST
			COMNORTHNORTHWEST
USA-E. Coast	Chatham	COMOCEANLANT	
	Miami		
	Tuckerton NJ (WSC)		
USA-W. Coast	San Francisco	CINCPACFLT	COMIDEASTFOR
	Guam		ALINDIEN
	Honolulu		
	Kodiak		
	Seattle (WA)(KLB)		
USA-Gulf	Mobile	CINCLANTFLT	
	New Orleans		
	Tampa FL (WPD)		
	Galveston TX (KLC)		

Notes:

- 1. + OCAs currently in abeyance.
 2. * For East bound voyages.
 3. ** For West bound voyages.

APPENDIX B SIGNAL MESSAGES' ADDRESSES AND ROUTING INDICATORS OF FOCAL POINTS

Country	Signal Message Address of Focal Point	Routing Indicator
Australia	DEFNAV CANBERRA	RWNN
Belgium	NOD BELGIUM	RQFZA (Telex 61880 VERTRA B)
Canada	NSA CANADA	RCCEODT
Denmark	CHOD DENMARK	RDFLH (Telex 22373 INDUMI DK) RFFIC for Unclassified RFFICY for Classified
France	TRANSPOROMAR PARIS	RFFIC for Unclassified
Germany	HAMBURG (VNCS)	EEVERWALTUNG HAMBURG (Telex 02 11 130 RGFAVH)
	NSA GERMANY (FNCS)	DGFAVX
Greece	NSA GREECE	RXFKA
Italy	MARIMERCHANT ROMA (Peacetime)	RIFMR (on line)
	MARIMERCHANT/NSA ITALY (Wartime)	(Telex G12153)
Netherlands	NLDIRGENSHIPPING (RNFLG) (Peacetime)	(Telex 31040) RZYXIH
	NSA NL (Wartime)	(Telex: 32408/34599 RNFLG)
New Zealand	NAVCOM NZ	RZYXCE
Norway	NSA NORWAY (Peacetime)	RYFWHU (Telex 74004 NSANO)
	NSA NORWAY (Wartime)	(Telex 33300/33359 NSANO N)
Portugal	NSA PORTUGAL	RPFNA
Turkey	NSA TURKEY	RXFEDC
United Kingdom	NSA UK	RBDTRY for Unclassified (Telex 22221 DOE MAR G)
		RBDWCR for Classified
United States	MARITIME ADMIN WASHINGTON DC//MAR 610/613/620// (Peacetime)	RULSDMK
	NSA US WASHINGTON DC//MAR 610/613/620// (Wartime)	(Telex 710-822-9426 MARAD DOT WSH) Route: 610/613/620

APPENDIX C

GENERAL MESSAGE ORGANIZATION

General messages are those which contain general information concerning operating and safety procedures and which require a wide distribution for national and/or allied merchant shipping. General messages may be unnumbered or numbered as explained below.

Prior to the activation of the full NCS organization, general messages are transmitted using peacetime procedures.

When the NCS organization has been activated, general messages of an urgent nature are transmitted at the completion of scheduled traffic list periods. Less urgent messages which do not require transmission to ships by radio are distributed to NCS authorities who will retain them for pickup by Masters in port.

General messages may be originated by:

- National authorities for their own merchant ships in any area (through the OCAs responsible for the areas concerned if the NCS organization has been activated).
- Allied OCAs for their area using unnumbered general messages only.
- The authorities identified in the table of this annex for numbered general messages.

UNNUMBERED GENERAL MESSAGES: Unnumbered general messages contain information likely to be of short term interest. Unless otherwise stated in the text, unnumbered general messages are self-canceling after 5 days. Unnumbered general messages are required by merchant ships:

- In a particular area.
- Which will pass through or arrive in that particular area before the cancellation of that message.

NUMBERED GENERAL MESSAGES: Numbered general messages contain information likely to be of long term interest. They remain in force until they are canceled by a separate general message. The identifying numbers for numbered general messages consist of five digits, the first three being the sequential series from 001 to 999

followed by the last two digits of the year; e.g., 00593 is the fifth numbered general message of the year 1993 in this message series. Authorities originating numbered general message series will promulgate periodic lists of numbered general messages still effective.

Responsibility for the delivery of general messages is assigned as follows:

- Unnumbered General Messages: The originating OCA is responsible for the reception by the ship of unnumbered general messages.
- Numbered General Messages:
- Before sailing the originating OCAs are responsible for dissemination of numbered general messages to NCS authorities worldwide. NCS authorities are responsible for providing all relevant numbered general messages to ships before sailing.
- At sea the OCA is responsible for dissemination of numbered general messages to all ships concerned at sea.
 Maintenance of numbered general messages series will be accomplished as follows:
- Allied merchant ships are to maintain a complete series of all numbered general messages for the areas in which they are to sail.
- New messages of all series will be relayed to ships at sea via the MERCOMMS system if required.
- NCS authorities at port level worldwide will maintain a complete series of all numbered general messages.
- When in harbor, ships' numbered general messages series are to be brought up-to-date before sailing; it is the Master's responsibility to ensure that this is done.

To request promulgation, authorities requiring a numbered general message to be issued to merchant ships are to send the text of the message to the appropriate originators. The text is to be preceded by the phrase, "Request the following be promulgated as a (Message Identifier)."

The following table shows the organization of message identifiers, areas served, and originating authorities:

MESSAGE IDENTIFIER	AREA	ORIGINATOR
ALMERBALTIC	BALTIC	COMBALTAP
ALMERNORGE	NORWEGIAN COASTAL AREAS	COMNORTH
ALMERNWEUR	NORTHWEST EUROPE AREA	COMNAVNORTHWEST
ALMEREASTLANT	CENTLANT	CINCEASTLANT
	NORLANT	
ALMERIBERLANT	IBERLANT	CINCIBERLANT
ALMERWESTLANT	CANLANT	CINCWESTLANT
	OCEANLANT	
	CARIBBEAN	
ALMERMED	MEDITERRANEAN	COMNAVSOUTH
ALMERPAC	EASTPAC	CINCPACFLEET
	MARPAC	

MESSAGE IDENTIFIER	AREA	ORIGINATOR
ALMERPAC	WESTPAC	CINCPACFLEET
	DELTA	
ALMERAUS	AUSTRALIA	CNS AUSTRALIA
ALMERNZ	NEW ZEALAND	NAVCOMNZ
ALMERABC	ALFA	CINCWESTLANT
	BRAVO	
	CHARLIE	

APPENDIX D

INSTRUCTION TO MASTERS IN AN EMERGENCY ON DEFENSE AGAINST NUCLEAR FALLOUT

Attacks with nuclear weapons may be expected on land targets adjacent to your route. Such attacks are likely to result in radioactive fallout being deposited over large areas of sea, through which you may have to pass. It may be possible to issue a general warning to indicate which areas are likely to be dangerous at any particular time.

As fallout will probably be in the form of fine dust which may be invisible, you should observe the following precautions at all times when in the following sea areas:

- ENGLISH CHANNEL East of 5°W.
- NORTH SEA South of 57°N.
- NORTH PACIFIC North of 45°N.
- SEA OF JAPAN.
- EAST CHINA SEA.

If your ship is equipped with the necessary instruments to detect fallout, these precautions may be relaxed accordingly.

PRECAUTIONS TO BE TAKEN: If your ship has a prearranged radioactive countermeasure plan prepared, ensure that all measures laid down in that plan are carried out. If no such plan is in existence, improvise measures as indicated below:

- Select a group, or groups, of compartments as low in the ship and as far removed from the ship's side as possible within which the crew can take shelter. These spaces should be equipped with washing and lavatory facilities, and sufficient food should be stowed there to last for the passage through the dangerous area. Spaces selected should be capable of being completely shut down with all ventilation and other openings secured.
- Strike below or cover as much gear on the weather decks as possible, particularly absorbent materials such as line, awnings, etc. Ensure that food stores and galleys are secured with all openings closed. Stop all ventilation fans and close or cover all ventilation and other openings which are not essential for running machinery and continued steaming. In the absence of suitable closures, the use of adhesive tape, etc., is recommended.

- Rig all available fire-fighting and deck washing hoses and nozzles to spray water continuously over as much of the weather decks and superstructure as possible, to prevent contamination settling. If complete coverage is impossible, concentrate effort on the navigating position, over the top of the shelter position(s), and above the machinery spaces.
- If a continual spraying of the upper works is impracticable, organize working parties at frequent intervals to wash down the weather decks and superstructure to reduce the buildup of contamination.
- Reduce the number of your crew who must remain on the weather decks or in positions near the weather decks, or in machinery spaces, to the bare minimum required for safe steaming, and keep the remainder in the selected shelter position(s).
- Ensure that all who must remain in exposed positions (including machinery spaces, unless ventilation can be stopped) are fully clothed, preferably in foul weather clothing, with all skin covered so far as practicable.
- During the passage, so far as the numbers of appropriately skilled personnel allow, change around those manning exposed or relatively unsheltered positions (including the machinery spaces) as often as possible in order to spread the radiation dosage. Remember that this advice also applies to the Master, who should take as much shelter as the safe navigation of the ship will permit.
- Ensure that all who have been exposed remove at least their outer clothing on returning to shelter, wash thoroughly their exposed skin (especially hands, face, and neck) as soon as possible, and in any case before drinking or eating.
- Restrict unnecessary movement throughout the ship to minimize the possible spread of contamination.
- Unless absolutely necessary, do not distill water for drinking while in a dangerous area.
- As soon as possible after clearing a dangerous area, carry out a thorough hosing down of the all weather decks and superstructure.